receiving the commodity data from the at least one commodity analysis system for discrete quantities of at least one commodity used or produced by the chain of production;

storing the commodity data to the information retrieval system; and

determining commodity information in accordance with the contents of the information retrieval system.

2. The method as claimed in claim 1 wherein the at least one commodity comprises one of an agricultural commodity, an aqua cultural commodity, an industrial commodity, a biological commodity and a pharmaceutical commodity.

3. The method as claimed in claim 1 wherein the production steps comprise one or more of acquiring, blending, refining, and transporting the discrete quantities and wherein the commodity data is generated in response to a production step.

4. The method as claimed in claim 1 including providing the commodity information to determine a use of at least a portion of at least one of the discrete quantities in the chain of production.

5. The method as claimed in claim 4 wherein the use is defined in accordance with a standard responsive to one or more commodity characteristics.

6. The method as claimed in claim 5 wherein the standard defines one of an identity preservation program, a specialty trait tracking program and a food safety certification program.

7. The method as claimed in claim 1 wherein said determining commodity information includes tracing commodity data for particular discrete quantities as said quantities flow through said chain of production.

8. The method as claimed in claim 7 wherein instances of said commodity data are generated for a particular discrete quantity as the quantity flows through the chain of

production and wherein said tracing comprises associating said instances of the commodity data with one another in the information retrieval system.

9.   The method as claimed in claim 1 wherein the at least one commodity characteristic includes at least one of a measured characteristic of the particular discrete quantity and a secondary characteristic determined for the particular discrete quantity.

10.   The method as claimed in claim 1 wherein the commodity data includes one or more source data identifying characteristics of the source of the commodity.

11.   (Canceled).

12.   (Currently Amended) The method of claim ~~11~~ 1 wherein ~~the update~~ updating comprises transmitting to the at least one commodity analysis system at least one of a software update, a lease update, and a data update.

13.   The method as claimed in claim 1 including providing a user interface for obtaining commodity information determined from commodity data stored to the information retrieval system.

14 – 29 (Canceled).

30.   For an information retrieval system coupled to a commodity analysis system configured to analyze at least one commodity to generate commodity data for a chain of production in which one or more commodities are used in one or more process steps, a method of managing the commodity analysis system comprising:

    receiving commodity data at the information retrieval system from the commodity analysis system for discrete quantities of at least one commodity used or produced by the chain of production; and

    tracking a use of the commodity analysis system.

31.   The method as claimed in claim 30 including invoicing in response to the determined use of the commodity analysis system.

32.   The method as claimed in claim 30 including transmitting an update to the commodity analysis system.

33.   The method of claim 32 wherein the update comprises at least one of a software update, a lease update, and a data update.

34.   The method as claimed in claim 30 including configuring the commodity analysis system to at least one of: automatically transmit commodity data to the information retrieval system, receive an update from the information retrieval system, and fail to generate commodity data in the absence of a current permission defined by said information retrieval system.

35.   (Currently Amended) A computer system for managing commodity data for a chain of production in which one or more commodities are used in one or more ~~process~~ production steps, the system comprising:

    an information retrieval system for storing commodity data for a plurality of discrete quantities of at least one commodity used or produced by the chain of production, the commodity data for each particular discrete quantity comprising at least one commodity characteristic; and

    a plurality of commodity analysis systems coupled to the data storage system for generating commodity data to be stored by the data storage system, each commodity analysis system operating under control of a program to perform commodity analysis and storage operations as identified by said program; and each commodity analysis system including at least one instrument for analyzing the commodity for determining the at least one commodity characteristic; and

    said information retrieval system adapted to update the commodity analysis systems to maintain currency.

36.   The system as claimed in claim 35 wherein each said commodity analysis system comprises a user interface for receiving commodity data for storing to said information retrieval system in association with commodity data determined by analysis.

37.   The system as claimed in claim 35 wherein said commodity analysis system is adapted via a user interface for retrieving commodity information from said information retrieval system.

38.   The system as claimed in claim 37 wherein the commodity information is retrieved for determining a use in the chain of production of at least a portion of at least one of the discrete quantities.

39.   The system as claimed in claim 37 wherein said information retrieval system is configured to enable tracing of commodity data as particular quantities of a commodity flow through said chain of production.

40.   The system as claimed in claim 35 wherein the commodity analysis system is configured for determining at least one commodity characteristic for evaluating compliance with a commodity standard.

41.   The system as claimed in claim 40 wherein the commodity standard defines one of an identity preservation program, a specialty trait tracking program and a food safety certification program.

42.   The system as claimed in claim 35 wherein the commodity data includes source data identifying the source of the commodity.

43.   The system as claimed in claim 35 wherein the commodity analysis systems are configured to:

        analyze one or more commodities to provide measurement data for each commodity analyzed;

        examine said measurement data to determine at least one commodity characteristic; and

        generate the commodity data for particular discrete quantities of the one or more commodities.

44.   The system as claimed in claim 43 wherein the commodity analysis systems are configured to examine said measurement data in accordance with a library of comparative data for determining commodity characteristics.

45.   The system as claimed in claim 44 wherein the commodity analysis systems are configured to use one or more artificial intelligence programs for determining commodity characteristics.

46.   The system as claimed in claim 35 wherein at least one commodity analysis system is configured to periodically gather commodity data from a plurality of commodity analyses into a batch and transmit the batch to said information retrieval system for storing said commodity analysis data.

47.   The system as claimed in claim 35 wherein the information retrieval system includes a billing component for billing a use of the commodity analysis systems.

48.   The system as claimed in claim 35 wherein the information retrieval system comprises an update component to transmit an update to at least one of the commodity analysis systems, the update comprising one of a software update, a lease update and a data update.

49.   The system as claimed in claim 35 wherein at least one commodity analysis system comprises a regulation component to regulate the generation of commodity analysis data in response to a current permission defined by the information retrieval system.

50. - 83. (Canceled).

REMARKS/ARGUMENTS

The above amendment is submitted with respect to claims 1-83 that were filed with the International Application. By this amendment, claims 1, 12 and 35 are currently amended and claims 11, 14-29 and 50-83 are canceled.

No new matter is believed to be introduced herein.

Applicants believe that the present invention, particularly as claimed herein, defines patentable subject matter that is entitled to protection in the United States. Accordingly early and favorable action is requested.

If the Examiner believes there are any matters that need to be discussed in order enter the amendment or otherwise put the present application in condition for allowance, the Examiner is invited to telephone the undersigned to expedite prosecution.

Respectfully submitted,

Date: <u>December 7, 2004</u>

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